

CLAIMS

What is claimed is:

- 5 1. A mobile telephone, comprising:
a core assembly for supporting at least one functional component of the mobile
telephone; and
a shell for substantially enclosing the core assembly,
wherein the shell is molded as a single piece around the core assembly.
- 10 2. The mobile telephone as claimed in claim 1, wherein the core assembly
further comprises a user interface input/output device for communication of information
with a user of the mobile telephone.
- 15 3. The mobile telephone as claimed in claim 2, wherein the user interface
input/output device comprises a display assembly for displaying information to the user,
the display assembly being viewable through the shell.
4. The mobile telephone as claimed in claim 2, wherein the user interface
20 input/output device comprises a keypad assembly.
5. The mobile telephone as claimed in claim 1, wherein the core assembly
further comprises a functional core including a printed circuit board assembly supporting
the at least one functional component.
- 25 6. The mobile telephone as claimed in claim 5, where in the at least one
functional component comprises at least one of a core processor, an antenna, a SIM card
reader, memory, and an I/O connector.
- 30 7. The mobile telephone as claimed in claim 5, wherein the core assembly

further comprises an electrical power source.

8. The mobile telephone as claimed in claim 7, wherein the electrical power source comprises a battery assembly coupled to the printed circuit board assembly.

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9. The mobile telephone as claimed in claim 8, wherein the shell is formed of a resilient material, and wherein the printed circuit board assembly and battery assembly function as a backbone for the mobile telephone for providing rigidity to the shell.

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10. The mobile telephone as claimed in claim 1, wherein the shell is rigid.

11. The mobile telephone as claimed in claim 1, wherein the shell is formed of a resilient material, and wherein the functional core assembly forms a backbone for the mobile telephone for providing rigidity to the shell.

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12. A method for assembling a mobile telephone, comprising:
assembling a functional core assembly including at least one functional component of the
mobile telephone; and
molding a shell about the functional core assembly, the shell substantially enclosing the
functional core assembly.

13. The method as claimed in claim 12, wherein the step of assembling the
functional core assembly comprises assembling a functional core including a printed
circuit board assembly wherein the at least one functional component is supported by the
printed circuit board assembly.

14. The method as claimed in claim 13, wherein the step of assembling the
functional core assembly further comprises coupling an ancillary hardware component
to the functional core.

15. The method as claimed in claim 13, wherein the step of assembling the
functional core assembly further comprises coupling a user interface input/output device
to the functional core.

16. The method as claimed in claim 13, wherein the step of assembling the
functional core assembly further comprises coupling a display assembly and a keypad
assembly to the functional core.

17. The method as claimed in claim 13, wherein the step of assembling the
functional core assembly further comprises coupling a battery assembly to the functional
core.

18. The method as claimed in claim 12, wherein the step of molding a shell
about the functional core assembly comprises placing the functional core assembly in a
molding apparatus wherein the shell is molded around the functional core assembly, and

removing the mobile telephone from the molding apparatus.

19. The method as claimed in claim 12, further comprising adding indicia to the shell.

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20. The method as claimed in claim 12, further comprising painting the shell after molding.

21. The method as claimed in claim 12, further comprising testing the mobile
10 telephone for proper operation.

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22. A method for assembling a mobile telephone, comprising:
assembling a functional core including a printed circuit board supporting at least one
functional component of the mobile telephone;
5 attaching ancillary hardware necessary for operation of the mobile telephone to the
functional core to form a core assembly;
placing the functional core assembly in a molding apparatus;
molding a shell about the functional core assembly, the shell substantially enclosing the
functional core assembly; and
10 removing the mobile telephone from the molding apparatus after molding of the shell.

23. The method as claimed in claim 22, wherein the step of attaching ancillary
hardware to the functional core comprises coupling a display assembly to the functional
core.

24. The method as claimed in claim 22, wherein the step of attaching ancillary
hardware to the functional core comprises coupling a keypad assembly to the functional
core.

25. The method as claimed in claim 22, wherein the step of attaching ancillary
hardware to the functional core comprises coupling a battery assembly to the functional
core.

26. The method as claimed in claim 22, further comprising adding indicia to
the shell.

27. The method as claimed in claim 22, further comprising painting the shell
after molding.

28. The method as claimed in claim 22, further comprising testing the mobile telephone for proper operation.